

TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
1.0 INTRODUCTION	1-1
1.1 PURPOSE	1-1
1.2 ORGANIZATION OF FINAL EIR	1-1
1.3 DECISION-MAKING PROCESS.....	1-2
2.0 SUMMARY OF PUBLIC REVIEW PROCESS	2-1
2.1 NOTICE OF PREPARATION / INTENT AND SCOPING	2-1
2.2 DRAFT EIR/EIS PUBLIC REVIEW	2-2
Public Review Period	2-2
Public Hearings	2-2
EIR Information and Repository Sites	2-2
3.0 RESPONSE TO COMMENTS	3-1
COMMENT SET 1: SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS, CLEARINGHOUSE	3-2
RESPONSE TO COMMENT SET 1: SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS, CLEARINGHOUSE.....	3-3
COMMENT SET 2: REGIONAL WATER QUALITY CONTROL BOARD – CENTRAL COAST REGION	3-4
RESPONSE TO COMMENT SET 2: REGIONAL WATER QUALITY CONTROL BOARD – CENTRAL COAST REGION.....	3-6
COMMENT SET 3: CALIFORNIA DEPARTMENT OF TRANSPORTATION	3-7
RESPONSE TO COMMENT SET 3: CALIFORNIA DEPARTMENT OF TRANSPORTATION.....	3-9
COMMENT SET 4: CALIFORNIA COASTAL COMMISSION	3-10
RESPONSE TO COMMENT SET 4: CALIFORNIA COASTAL COMMISSION	3-11
COMMENT SET 5: SANTA BARBARA COUNTY AIR POLLUTION CONTROL DISTRICT	3-12
RESPONSE TO COMMENT SET 5: SANTA BARBARA COUNTY AIR POLLUTION CONTROL DISTRICT	3-29
COMMENT SET 6: VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT	3-32
RESPONSE TO COMMENT SET 6: VENTURA COUNTY AIR POLLUTION CONTROL DISTRICT	3-33
COMMENT SET 7: SANTA BARBARA COUNTY - PLANNING AND DEVELOPMENT.....	3-34
RESPONSE TO COMMENT SET 7: SANTA BARBARA COUNTY - PLANNING AND DEVELOPMENT.....	3-38
COMMENT SET 8: CITY OF GOLETA.....	3-42
RESPONSE TO COMMENT SET 8: CITY OF GOLETA.....	3-48
COMMENT SET 9: GET OIL OUT.....	3-50
RESPONSE TO COMMENT SET 9: GET OIL OUT.....	3-57
COMMENT SET 10: CITIZENS FOR GOLETA VALLEY	3-60
RESPONSE TO COMMENT SET 10: CITIZENS FOR GOLETA VALLEY	3-62

<u>Section</u>	<u>Page</u>
COMMENT SET 11: GRAY WHALES COUNT	3-64
RESPONSE TO COMMENT SET 11: GRAY WHALES COUNT	3-66
COMMENT SET 12: CITIZENS PLANNING ASSOCIATION	3-67
RESPONSE TO COMMENT SET 12: CITIZENS PLANNING ASSOCIATION	3-68
COMMENT SET 13: SANTA BARBARA LEAGUE OF WOMEN VOTERS.....	3-69
RESPONSE TO COMMENT SET 13: SANTA BARBARA LEAGUE OF WOMEN VOTERS	3-71
COMMENT SET 14: NICOLE STRASBURG.....	3-72
RESPONSE TO COMMENT SET 14: NICOLE STRASBURG.....	3-74
COMMENT SET 15: DAVID K. SANGSTER	3-75
RESPONSE TO COMMENT SET 15: DAVID K. SANGSTER	3-84
COMMENT SET 16: VENOCO, INC.....	3-86
RESPONSE TO COMMENT SET 16: VENOCO, INC.....	3-110
4.0 REVISED PAGES TO THE DRAFT EIR	4-1
EXECUTIVE SUMMARY	4-1
SECTION 1: INTRODUCTION	4-1
SECTION 2: PROJECT DESCRIPTION.....	4-1
SECTION 3: ALTERNATIVES	4-3
SECTION 4: ENVIRONMENTAL ANALYSIS	4-9
SECTION 4.1: GEOLOGICAL RESOURCES.....	4-12
SECTION 4.2: HAZARDS AND HAZARDOUS MATERIALS	4-12
SECTION 4.3: AIR QUALITY.....	4-26
SECTION 4.4: HYDROLOGY, WATER RESOURCES, AND WATER QUALITY	4-37
SECTION 4.5: BIOLOGICAL RESOURCES	4-39
SECTION 4.7: LAND USE, PLANNING, AND RECREATION	4-40
SECTION 4.9: TRANSPORTATION AND CIRCULATION	4-43
SECTION 4.10: NOISE	4-45
SECTION 6: MITIGATION MONITORING PROGRAM	4-45
SECTION 8: REFERENCES	4-54

LIST OF APPENDICES

Hearing Transcripts

LIST OF TABLES

<u>Section</u>	<u>Page</u>
Table 3-1 Commenters and Comment Set Number	3-1

LIST OF ABBREVIATIONS AND ACRONYMS

AADT	Annual Average Daily Traffic
AAPL	All-American Pipeline
AAQS	Ambient Air Quality Standards
AB	Assembly Bill
ACHP	Advisory Council on Historic Preservation
ACOE	U.S. Army Corps of Engineers
ADL	Arthur D. Little, Inc.
ADT	Average Daily Traffic
ACTI	Advanced Cleanup Technologies Inc.
AIChE	American Institute of Chemical Engineers
ANSI	American National Standards Institute
Ann. Arith. Mean	Annual Arithmetic Mean
APCD	Air Pollution Control District
APE	Area of Potential Effect (National Historic Preservation Act)
API	American Petroleum Institute
AQ	Air Quality
AQMD	Air Quality Management District
ARB	Air Resources Board
ASME	American Society of Mechanical Engineers
ASTM	American Society for Testing and Materials
ATC	Authority to Construct
AQAP	Air Quality Attainment Plan
AWOIS	Automated Wreck and Obstruction Information System
bbls	barrels
bcfd	billion cubic feet per day
bhp	brake horsepower
BIA	Bureau of Indian Affairs
BLM	Bureau of Land Management
BMPs	Best Management Practices
BO	Biological Opinion
bod	biological oxygen demand
BOP	Blowout prevention
BPD	barrels per day
BPH	barrels per hour
BTEX	benzene, toluene, ethylbenzene, and xylene
Btu	British thermal unit
bwpd	barrels of water per day
°C	degrees Celsius
CAA	Clean Air Act
CAAA	Clean Air Act Amendments
CAAQS	California Air Quality Standards
CAER	Community Awareness and Emergency Response
CAIN	Carpinteria Inshore
CalARP	California Accidental Release Program
CalCOFI	California Cooperative Oceanic Fisheries Investigations
Cal/OSHA	California Division of Occupational Safety and Health
Caltrans	California Department of Transportation
CaMP	California Monitoring Program

CAMP	California Offshore Monitoring Program
CAP	Clean Air Plan
CARB	California Air Resource Board
Carone	Carone Petroleum Corporation
CBC	California Building Code
CCA	California Coastal Act
CCC	California Coastal Commission
CCCCS	Central California Coastal Circulation Study
CCIC	Central Coastal Information Center
CCMP	California Coastal Management Program
CCPS	Center for Chemical Process Safety (American Institute of Chemical Engineers)
CCR	California Code of Regulations
CCW	Converse Consultants West
CDFG	California Department of Fish and Game
CDMG	California Division of Mines and Geology
CDOGGR	California Department of Geology and Geological Resources
CEC	California Energy Commission
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
cfs	cubic feet per second
CGS	California Geological Survey
CH ₄	methane
CHP	California Highway Patrol
CINMS	Channel Islands National Marine Sanctuary
CLUP	Coastal Land Use Plan
cm	centimeter(s)
CMP	Congestion Management Program
cm/sec	centimeters per second
CNDDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNG	compressed natural gas
C _n H _{2n+2}	alkane
CNPS	California Native Plant Society
CO	carbon monoxide
CO ₂	carbon dioxide
COPR	Coal Oil Point Reserve
COOGER	California Offshore Oil and Gas Energy Resources
CPF	Carpinteria Oil and Gas Processing Facility
CPFV	commercial passenger fishing vessel
CPU	Cavern Point Unit
CSFM	California State Fire Marshal
CSLC	California State Lands Commission
CSC	California Species of Concern
CUP	Conditional Use Permit
CV	check valve
CWA	U.S. Clean Water Act
CZARAA	Coastal Zone Act Reauthorization Amendments
CZM	Coastal Zone Management

CZMA	Coastal Zone Management Act
dB	decibels
dBA	decibels on the A-weighted scale
DFG	Department of Fish and Game
DMRs	Discharge Monitoring Reports
DO	dissolved oxygen
DOCD	Development Operations Coordination Documents
DOGGR	California Division of Oil, Gas, and Geothermal Resources
DOT	U.S. Department of Transportation
DPP	Development and Production Plan
EA	Environmental Assessment
EAP	Emergency Action Plan
EDL	elevated data levels
EFH	Essential Fish Habitat
EI	Environmental inspector
EIR	Environmental Impact Report
EIS	Environmental Impact Statement/Study
EMR	Emergency Response
EMT	Ellwood Marine Terminal
EOF	Ellwood Onshore Oil and Gas Facility
EPA	U.S. Environmental Protection Agency
EPNG	El Paso Natural Gas Company
ER	Energy Resources
ERC	emission-reduction credit(s)
ERD	extended-reach drilling
ERL	effects range-low
ERM	effects range-medium
ERNS	Emergency Response and Notification System
ERP	Emergency Response Plan
ERPG	Emergency Response Planning Guidelines
ERW	electric resistance welded
ES	Executive Summary
ESA	Endangered Species Act
ESD	emergency shutdown/Emergency Shutdown System
ESE	Entire Source Emissions
°F	degrees Fahrenheit
FAA	Federal Aviation Administration
FAR	Federal Air Regulation
FBE	Fusion Bonded Epoxy
FDP	Final Development Plan
FERC	Federal Energy Regulatory Commission
FHWA	Federal Highway Administration
FIRM	Flood Insurance Rate Maps
FMC	Fishery Management Council
FMMP	Farmland Mapping and Monitoring Program
FMP	Fishery Management Plan
FN	frequency of fatalities
fps	feet per second
FRSB	Fast Response Spill Boat
FSC	Federal Species of Concern
FSRU	Floating storage and re-gasification unit

ft	feet
ft ²	square feet
ft ³	cubic feet
FT	flow transmitter
FWKO	Free Water Knock-Out
FWPCA	Federal Water Pollution Control Act
GCP	Goleta Community Plan
GHG	greenhouse gases
GIS	Geographic Information System
GNOME	General NOAA Oil Modeling Environment
GOIN	Goleta Inshore
gpd	gallons per day
gpm	gallons per minute
GUL	guided ultrasonic testing
GWh	Gigawatt-hour
H ₂ S	hydrogen sulfide
HAPs	Hazardous Air Pollutants
HARP	Hotspots Analysis and Reporting Program
HAZMAT	Hazardous Materials Response Division of NOAA
HazOp	Hazard and Operability
HCM	Highway Capacity Manual
HI	health index
HLID	Hydrocarbon Leak and Ignition Database
hp	horsepower
Hz	Hertz
IC	Incident Commander
IC	internal combustion
ICE	internal combustion engine
ICS	Incident Command System
ID	inside diameter
IIRT	initial incident response team
IMO	International Maritime Organization
IRI	Industrial Risk Insurers
JRP	Joint Review Panel
kg	kilogram
kg/day	kilograms per day
kHz	kiloHertz
KLI	Kinetic Laboratories, Inc.
km	kilometers
/km ²	per square kilometer
km/h	kilometers per hour
kPa	kiloPascals
ks	Knots or Nautical miles per hour
kW	kilowatt
kWh	kilowatt-hour
kW/m ²	kilowatts per square meter
kV	kilovolt
L ₁₀	sound level exceeded 10 percent of the time over a specified period
lbs	pounds
lbs/day	pounds per day
LACT	Lease Automatic Custody Transfer

LCP	Local Coastal Program
L_{dn}	day-night sound level
LEL	lower explosion level
L_{eq}	equivalent steady sound level that provides an equal amount of acoustical energy as the time-varying sound
$L_{eq(24)}$	24-hour equivalent sound level
LFL	lower flammability level
Line 96	common carrier ExxonMobil Pacific Line 96
LNG	Liquefied Natural Gas
LOS	Level of Service
LPG	liquefied petroleum gas
LRDP	Long Range Development Plan
LTA	Local Transportation Authority
LTS	low temperature separation
m	meter(s)
m/s	meters per second
/m	per meter
/m ²	per square meter
/m ³	per cubic meter
m ³	cubic meters
m ³ /day	cubic meters per day
m ³ /hr	cubic meters per hour
m ³ /yr	cubic meters per year
M	Million (as a prefix)
µg/L	micrograms per liter
µg/m ³	micrograms per cubic meter
mg/l	milligrams per liter
MAOP	maximum allowable operating pressure
MARSEC	Maritime Security
MAWP	maximum allowable water pressure
mbd	thousand barrels per day
MCE	Maximum Credible Earthquakes
MGD	million gallons per day
MGY	million gallons per year
mg/kg	milligrams per kilogram dry weight
mile ²	square miles
ml	milliliters
MLLW	mean lower low water
mm	millimeter(s)
MM	Mitigation measure
mmcf	million cubic feet per day
MMCRP	Mitigation Monitoring, Compliance, and Reporting Program
MMP	Mitigation Monitoring Program
MMPA	Marine Mammals Protection Act
MMS	Minerals Management Service
MMscfd	million standard cubic feet per day
MMTCE	million metric tons of carbon equivalent
MODU	mobile offshore drilling unit
MOTEMS	Marine Oil Terminal Engineering and Maintenance Standards
MOV	motor operated valve
MP	milepost

mph	miles per hour
MPN	most probable number
MPO	Metropolitan Planning Organization
MRS	Marine Research Specialists
m/s	meter(s) per second
mscfd	thousand standard cubic feet per day
MSFCMA	Magnuson-Stevens Fishery Conservation and Management Act
mt/yr	metric tons/year
MW	megawatt
MWh	megawatt hour
N ₂ O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NACE	National Association of Corrosion Engineers
NAROC	non-alkaline reactive organic compounds
NDBC	NOAA Data Buoy Center
NEC	National Electric Code
NEPA	National Environmental Policy Act
NESHAP	National Emission Standards for Hazardous Air Pollutants
NFPA	National Fire Protection Association
NG	natural gas
NGA	Natural Gas Act
NGL	natural gas liquids
nm	nautical miles
NMFS	National Marine Fisheries Service
NO	nitric oxide
NO ₂	nitrogen dioxide
NOAA	National Oceanic and Atmospheric Administration
NOD	Notice of Determination
NOI/P	Notice of Intent/Preparation
NOP	Notice of Preparation
NO _x	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NPREP	National Preparedness for Response Exercise Program
NRC	National Response Center
NRCS	Natural Resource Conservation Service
NRHP	National Register of Historic Places
NSA	noise sensitive area
NWI	National Wetlands Inventory
NWR	National Wildlife Refuge
O ₃	ozone
O&M	operation and maintenance
OCS	Outer Continental Shelf
OCSLA	Outer Continental Shelf Lands Act
OD	outer diameter
OES	Office of Emergency Services
OPA	U.S. Oil Pollution Act
OPR	Office of Planning and Research
OPS	U.S. Office of Pipeline Safety
OPUS	Organization of Persistent Upwelling Structures
OSCP	Oil Spill Contingency Plan
OSHA	Occupational Safety and Health Administration

OSPR	Oil Spill Prevention and Response
OSRA	Oil Spill Risk Analysis
OSRO	Oil Spill Response Organization
OSRP	Oil Spill Response Plan
OSRV	Oil Spill Response Vessel
PAH	poly-aromatic hydrocarbons
Pb	lead
PEL	probable effects level
PLC	Programmable Logic Controller
PLEM	pipeline end manifold
PM	particulate matter
PM ₁₀	particulate matter less than 10 microns in diameter
PM _{2.5}	particulate matter less than 2.5 microns in diameter
POD	plan of development
POOI	Pacific Operators Offshore Incorporated
POPCO	Pacific Offshore Pipeline Company
POSVCM	Pipeline Oil Spill Volume Computer Model
PPA	Pressure Point Analysis
ppb	parts per billion
PPE	personal protective equipment
ppm	parts per million
ppmv	parts per million by volume
PRC	Public Resources Code
PRD	pressure/vacuum relief device
PREP	Preparedness For Response Exercise Program
PRI	Petroleum and Refractory, Inc.
PSD	Prevention of Significant Deterioration
psi	pounds per square inch
psia	pounds per square inch, absolute
psig	pounds per square inch, gauge
PSV	Pressure safety valve
Pt.	Point (geographical term)
PT	pressure transmitter
PTE	potential to emit
PTO	permit to operate
QRA	Quantitative Risk Analysis
RILP	Rincon Island Limited Partnership
ROC	reactive organic compounds
ROG	reactive organic gases (also see ROC)
ROSF	Rincon Onshore Separation Facility
ROP	Rate of Progress Plan
ROV	remotely operated vehicle
ROW	right-of-way
rpm	revolutions per minute
RTPA	Regional Transportation Planning Agency
RTU	Remote Terminal Unit
RVP	Reid vapor pressure
RWQCB	Regional Water Quality Control Board
SAIC	Science Applications International Corporation
SARA	Superfund Amendments and Reauthorization Act
SB	Santa Barbara

SBCAG	Santa Barbara County Association of Governments
SBCAPCD	Santa Barbara County Air Pollution Control District
SBCFD	Santa Barbara County Fire Department
SBCP&D	Santa Barbara County Planning & Development Department
SBMMC	Santa Barbara Marine Mammal Center
SCADA	supervisory control and data acquisition system
SCCAB	South Central Coast Air Basin
SCCPA	South Coast Consolidation Planning Area
SCE	Southern California Edison
scf	standard cubic foot
scfd	standard cubic feet per day
SCGC	Southern California Gas Company
SCS	Soil Conservation Service
SDV	shutdown valve
SEIR	Supplemental Environmental Impact Report
SFA	Sustainable Fisheries Act
SHPO	State Historic Preservation Office
SIMQAP	Safety Inspection, Maintenance and Quality Assurance Program
SIO	Scripps Institution of Oceanography
SIRT	sustained incident response team
SLOB	San Luis Obispo Bay
SMB	Santa Maria Basin
SMW	State Mussel Watch
SO ₂	sulfur dioxide
SOC	Statement of Overriding Considerations
SOLAS	Safety of Life at Sea
SOO	Suspension of Operation
SOP	Suspension of Production
SO _x	oxides of sulfur
SPCC	Spill Prevention Control and Countermeasure
SPCCP	Spill Prevention Control and Countermeasure Plan
SPCP	Spill Prevention and Cleanup Plan
SSLO	South San Luis Obispo
SUPSALV	Supervisor of Salvage
SSRRC	System Safety and Reliability Review Committee
SVP	Society of Vertebrate Paleontologists
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
SYU	Santa Ynez Unit
TAC	Toxic Air Contaminants
TDS	total dissolved solids
TEL	Threshold Effects Level
TOC	total oxygen content
TPIC	Terminal Person in Charge
TRB	Transportation Research Board
TSSs	Traffic Separation Schemes
UBC	Uniform Building Code
UCSB	University of California, Santa Barbara
UFC	Uniform Fire Code
UNOCAP	Unocal California Pipeline Company
U.S.C.	United States Code

USCG	U.S. Coast Guard
USDA	U.S. Department of Agriculture
USDOI	U.S. Department of Interior
USDOT	U.S. Department of Transportation
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UV	ultra-violet
V/C	volume to capacity ratio
VC	Ventura County
VCAPCD	Ventura County Air Pollution Control District
VCE	vapor cloud fire/explosion
VMC	Visual Modification Classes
VOC	Volatile Organic Compound
VRU	Vapor Recovery Unit
WCD	Worst-case discharge
WDP	Waste Discharge Permit
WDRs	Waste discharge requirements
WIS	Wave Information Study
YOY	young of the year

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